



Achieving Cleaner Waters Across America

Supporting Effective Programs to Prevent Water
Pollution from Forestry Operations



North Cascades National Park. Source: Tetra Tech, Inc. 1974.

Forests are Key to Clean Water

Covering about one-third of the Nation's land area, forests are the starting point for 80 percent of our Nation's freshwater resources. Forested lands help to absorb rain, reduce flooding, and slow storm water runoff. In addition, forests help to refill underground aquifers, cool and cleanse water, and provide critical habitat for fish and wildlife. Forests also improve our quality of life by providing abundant recreational opportunities.



Lolo National Forest, Montana. A temporary bridge with silt fence is protecting the stream. Source: US EPA. October 1998.

Sound Forest Management Can Prevent Water Pollution

Implementation of properly designed forest management plans can result in logging activities that are both profitable and protective of water quality. These plans address the full range of forestry activities that can pollute waters—they locate special areas of protection; plan for the proper timing of forestry activities; and describe best management measures for road layout, design, construction, and maintenance, as well as for harvesting methods and forest regeneration.

In many parts of the country, federal agencies, states, and professional forest managers are implementing effective forest management plans using a range of tools including education, financial assistance, and regulatory requirements.

Some Forestry Operations Can Cause Water Pollution Problems



Dead Stream, Maine. Sedimentation from timber haul road crossing. Source: Maine Forest Service. July 1998.

Despite these public and private forest management efforts, sediments, excess nutrients, and other pollutants from forestry operations that are not being properly managed have caused and are still causing water quality problems—preventing waters from being used for fishing, swimming, or as a source of drinking water. In 1998, 32 states identified forestry as a source of water quality problems that affects more than 20,000 miles of rivers and streams; 220,000 acres of lakes; and 15 square miles of coastal waters. Due to data limitations, these numbers underestimate the amount of waters impaired by forestry operations.

Proposals to Achieve Cleaner Waters

Many states have been successful in addressing water pollution from forestry activities through voluntary programs, and other states have adopted regulatory requirements that support these voluntary efforts. EPA has supported these efforts in the past and will continue to support them in the future. For example, EPA provides states with grant funds to support voluntary programs addressing diffuse sources of water pollution, including runoff from forestry operations. This funding has recently been increased from \$100 million to \$200 million per year.

The Clean Water Act directs states and EPA to work together to identify impaired waters and develop plans (called Total Maximum Daily Loads—or TMDLs) to restore the health of polluted waters. In August 1999, EPA proposed revisions to the TMDL and other associated Clean Water Act programs to help improve and strengthen efforts to achieve cleaner waters across the country.

A key element of these proposed changes is a clearer process for defining needed pollution control measures and for assuring that these measures are being implemented. State programs of proven effectiveness, whether voluntary or regulatory, are an acceptable basis for assuring implementation. Where such programs do not exist, however, clear authority to require implementation of measures to restore water quality is needed.

Proposed New Authority Is Narrowly Focused

The proposed regulations would provide states, most of which administer the Clean Water Act discharge permit program, with the option of using this program to control pollution from forestry operations, but only where:

- the operation includes a “discharge” of storm water from a discrete conveyance; and
- the state permit authority determines that the operation is a “significant contributor” of pollutants or is contributing to the violation of a water quality standard.

Under these proposed regulations, forestry operations that are not causing significant water quality problems would not be subject to a permit. And even where forestry activities were causing significant water quality problems, state permit authorities would have the option of determining that other approaches, such as state voluntary or regulatory programs, are effective and sufficient to restore the health of the polluted water body.

Where a state identifies a polluted water body, it would develop a TMDL to restore the water, including a “reasonable assurance” that the necessary pollution controls would actually be implemented. States would have the option to issue a Clean Water Act permit for a forestry storm water discharge where needed to supplement other appropriate mechanisms and provide “reasonable assurance” that the pollution control measures would be implemented. EPA expects that states will only use this permit option to address “bad actors” who have not responded to various non-regulatory approaches.

EPA’s Role Is Limited to Back-Stopping States

The Clean Water Act requires that EPA review and approve TMDLs as adequate to restore the health of polluted waters. Where a state TMDL is not adequate, EPA is required to establish the TMDL. Where EPA establishes TMDLs that call for pollution reduction from forestry, the Agency will rely on voluntary, incentive-based approaches where they are proven effective. Where no other option is available, the proposed regulations would allow EPA to designate a forestry storm water discharge as needing a Clean Water Act permit. EPA expects to use this authority only as a last resort.



Boise National Forest, Idaho. An earth slide, triggered by a timber harvest, is chronically delivering sediment to a bulltrout stream. Source: IDEQ-EPA sediment source inventory. December 1998.



Middle James-Buffer Buffalo Watershed, Virginia. Some road drainage structures are not sufficient to control soil erosion. Source: US EPA. August 1999.

For More Information

For more information, contact EPA's Office of Wastewater Management (mailcode 4203), Washington, DC 20460, (202) 260-9541 or visit www.epa.gov/owow/tmdl on the Internet. For more information about forestry best management practices and the development and implementation of forest management plans, contact EPA's Office of Wetlands, Oceans, and Watersheds (mailcode 4503F), Washington, DC 20460, or visit www.epa.gov/owow/nps/MMGI/Chapter3 on the Internet.



Upper New Watershed, North Carolina. Temporary harvest road recontoured, seeded, and stabilized to protect adjacent stream system. Source: US EPA. August 1999.